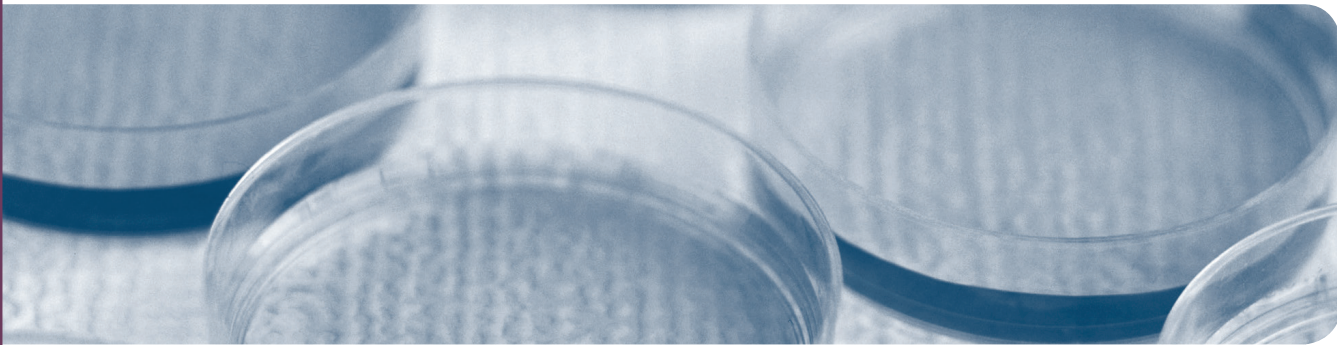


## The Life of a Blood Culture at Spectra Laboratories

- 1 Upon receipt, blood culture bottles are visually inspected to detect microbial growth.
- 2 If visual inspection is negative, bottles are incubated in our automated, continuous monitoring BacT/ALERT System for up to five days. If the culture is negative throughout the five day incubation period, a negative report will be issued at 2 hours, 24 hours and on each subsequent day.



- 3 If the bottles are visually positive upon receipt, or flagged as positive by the BacT/ALERT System anytime during the incubation period, a gram stain is performed for preliminary classification of microorganisms. Bottles are then subcultured on agar media for growth.
- 4 A Clinical Laboratory Scientist compares the gram stain results to the organism growing on the plated agar media and proceeds with setting up identification and susceptibilities. Identification and susceptibilities are typically achieved within 6-8 hours from set-up time.
- 5 The Clinical Laboratory Scientist reports all of the identifications and susceptibilities completed by the Vitek System. The majority of identifications and susceptibilities will be reported within 24 hours from the day growth is detected on plated media unless there are unusual or slow growing organisms.

## Microbiology Testing Services

- Anaerobic culture
- Blood culture
- Body fluid culture
- Catheter exit site culture
- Catheter tip culture
- Ear/eye culture
- Environmental
  - Total Viable Microbial Count (water, bicarbonate, dialysate)
  - Endotoxin (water, bicarbonate, dialysate)
- Fungal culture
- Genital culture
- Gram stains
- KOH prep
- MRSA/VRE screen
- Nasopharyngeal/throat culture
- Peritoneal fluid
  - PD fluid, effluent
  - Gram stain
  - Cell count
- Sputum culture
- Stools
  - Clostridium difficile culture and toxin assays
  - Routine culture
  - WBC (fecal leukocytes)
  - Occult blood
  - Ova and parasite
- Wound culture
- Urine
  - Culture
  - Routine urinalysis



*Antibiotic susceptibility performed on pathogens based on standards as defined by CLSI*

*Licensed by multiple states, including the New York State Department of Health and the California State Department of Health, our facilities are also CLIA (Clinical Laboratory Improvement Act) certified. Our microbiology laboratories are further certified and uphold the strict standards set forth by the National Environmental Laboratory Accreditation Conference (NELAC), Association for the Advancement of Medical Instrumentation (AAMI), as well as the New York State ELAP (Environmental Laboratory Approval Program).*



microbiology  
testing services



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You already know Spectra Laboratories for a wide array of dialysis-related testing services. Now get to know us for your microbiology needs.

As the leading provider of renal-specific testing services, we understand the special needs of your dialysis patients. We routinely deliver comprehensive microbiology culture handling, analyses, and reporting with the consistency and accuracy you expect.



Timely, accurate results  
seven days a week.

### Experience You Can Depend On

Our Clinical Laboratory Scientists have years of clinical microbiology experience, training, and knowledge—ensuring expert handling of your cultures. Our Microbiology Managers and Medical Directors have decades of clinical experience should you need to discuss specific needs, results, or interpretations.

### Helping You Improve Patient Outcomes

Spectra Laboratories has been at the forefront of the renal industry for over 35 years. Our programs enhance the treatment and outcomes of your dialysis patients, and continue to set new standards in quality and service:

#### State-of-the-Art Analysis Methods

As bacteria become resistant to more antibiotics, physicians need to know what kind of microbe is present and which antibiotic will be most effective. That's why Spectra Laboratories uses the advanced bacterial identification and susceptibility technology in the **Vitek 2 XL Automated System**.

The technology uses preformed enzymes to rapidly identify organisms. With the Vitek system's extensive knowledge base of phenotypes, identification and susceptibilities are typically achieved within 6-8 hours from set-up time.

Using the **BacT/ALERT 3D Microbial Detection System**, Spectra Laboratories can incubate, agitate, and continuously monitor aerobic and anaerobic media inoculated with blood, PD Fluid Cultures, and Body Fluid Cultures from patients suspected of having bacteremia/fungemia or fluid infection. This means positive cultures can be detected in as little as two hours from the time of incubation in the instrument.

#### Reproducible Reports

- Standardized protocols and instrumentation

#### Data-Driven Interpretation Guidelines

- Advanced Expert System for susceptibility reporting
- Antibigrams

#### Rapid, Comprehensive Reporting

- Web-based microbiology results
- Critical microbiology results faxed every 2-6 hours
- Immediate, direct notification of positive growth results
- Sunday Notification Program

#### Education and Support

- Instructions on proper specimen collection and handling
- Dedicated shipping boxes and collection kits for microbiology specimens
- Ongoing support from our team of Nephrology Clinical Educators

### Antibiogram Reports

Because Spectra Laboratories is focused on the renal industry, we can provide unique and valuable data to assist you in managing your clinical operation. As a complement to individual patient reports, we offer an Annual Antibiogram Report, which is derived from a microbiology database of all dialysis patient results. The report is available in three user-friendly formats:

1. Comprehensive
2. PD Fluid
3. Catheter Exit Site

Spectra Laboratories Antibiogram Example only

Isolated Organism	Antibiogram	Percentage of susceptible organisms																					
		Amikacin	Amoxicillin	Amoxicillin/Clavulanate	Augmentin	Cefazolin	Cefepime	Ceftriaxone	Ceftazidime	Ceftiofur	Chloramphenicol	Clindamycin	Daptomycin	Erythromycin	Gentamicin	Linezolid	Mergaptin	Moxifloxacin	Ofloxacin	Penicillin	Piperacillin/Tazobactam	Vancomycin	
<b>GRAM NEGATIVE</b>																							
Achromobacter xylosoxidans	80	20	9	51	0	4	28	7	92	7													
Aeromonas hydrophila	33	100	3	9	100	13	86	100	96	98													
Acinetobacter baumannii	109	98	52	99	32	9	81	29	63	56													
Acinetobacter species	45	87		97			81																
Acinetobacter unguis	229	99		99	95	100	99	98	99														
Acinetobacter lwoffii	100	98	84	97	31	10	86	41	87	50													
Acinetobacter antraxi	38	100		86	0	100	0	79	78														
Acinetobacter baumannii	191	100		87	0	100	0	86	86														
Acinetobacter lwoffii	229	99		99	95	100	99	98	99														
Acinetobacter species	62	100		90	4	100	92	92	89														
Acinetobacter antraxi	279	100		95	0	100	1	92	92														
Acinetobacter baumannii	53	100	19	48	94	0	100	91	94	94													
Acinetobacter lwoffii	1028	98		95	1	100	3	95	95														
Acinetobacter species	47	100		93	4	97	91	100	97														
Escherichia coli	2634	99	38	53	88	81	88	98	87	87													
Klebsiella oxytoca	214	100	0	80	95	84	96	99	95	96													
Klebsiella pneumoniae	3351	98	0	82	86	89	88	95	97	87													
Morganella morganii	250	100	0	96	0	99	96	88	96														
Paratuberculosis	130	100		94	81	100	95	95	96														
Pseudomonas	1075	98	72	79	92	82	89	88	89	89													
Proteus vulgaris	39	100	12	74	97	12	100	100	94														
Providencia stuartii	78	100	2	97	1	97	100	93	97														
Pseudomonas aeruginosa	1759	97	0	0	0	94	0	93	0														
Pseudomonas labialis	79	97	47	84	0	97	89	97	92														
Pseudomonas putida	88	98	2	4	0	100	6	92	13														
Pseudomonas species	38	97		94	16	100	100	100	94														
Pseudomonas stuartii	38	100	52	94	16	100	100	100	94														
Rasbulla platicola	32	100	0	90	96	93	100	100	93	100													
Serratia marcescens	851	99		97	0	99	99	97	96														
Springomonas paucimobilis	89	86	72	90	20	52	60	41	69	81													
Stenotrophomonas maltophilia	296																						
<b>GRAM POSITIVE</b>																							
Beta hemolytic Streptococcus	49		76				84						78		79		68					100	
Cocci Negative Staphylococcus	9579												41	99	31	75					43	99	63
Corynebacterium species	125												13	90									
Corynebacterium striatum	98												14	90									
Enterococcus casseliflavus	42		95										88		26							92	7
Enterococcus faecalis	2371		94										68		14							93	0
Enterococcus faecium	354		15										10		5							13	95
Enterococcus gallinarum	39		84										91		67							89	5
Enterococcus species	272		79										45		29							65	96
Staphylococcus aureus	13467												57	71	41	96						80	99
Staphylococcus epidermidis	423												96	75	76	98						98	82
Staphylococcus agalactiae	343		100										99	45								99	100
Staphylococcus pneumoniae	41												97									100	
Vibrio Streptococcus Group	482						83	79					87		87							86	100